

## **SMT Inductor**

## **Material Data Sheet**

Product Class	Shielded Power Inductor B82477G2***M000	4R7 7352
Date	07.04.2020	7352
IMDS ID if available		
Version	9	

Product Part (IMDS: semi component)	Material Class (IMDS: Material)	Material (Classification) VDA 231	Substance	TMPS**) [wt%]	CAS if applicable	typical mass of material [wt-%]	Traces see 1)
Active Part	Ceramic	4B	Nickel Zinc Ferrite	100	12645-50-0	59.0	
	Heavy Metal	1C	Cu	100	7440-50-8	23.4	
	Elastomer	2B	Polyurethane (PUR)	100	9009-54-5	1.2	
Encapsulation Duromer		2C	Epoxy (EP)	100	25068-38-6	2.3	
	Woven Material	3A Polyimide (PI)		100	26298-81-7	0.1	
	Duromer	2C	Acrylic polymer	100	9017-68-9		х
	Duromer	2C	Epoxy resin(EP)	100	25928-94-3	0.2	
			Quartz	30-50	14808-60-7		
	Organic, solid	5B	Dimethylvinylated and trimethylated silica	15-35	68988-89-6	0.6	
	-		Dimethyl siloxane, dimethylvinyl-terminated	40-60	68083-19-2		
	Organic, solid	5B	Dimethylhydropolysiloxane	100	68037-59-2	0.2	
	Heavy Metal	1C	Sn	100	7440-31-5	0.5	
Termination			Cu for L ≥15 µH	94	7440-50-8		
	Heavy Metal	1C	Cu for L ≥15 µH	6	7440-31-5	12.3	
	-		Cu for L ≤10 µH	100	7440-50-8		
	Heavy Metal	1C	Ni	100	7440-02-0		x
	Heavy Metal	1C	Sn	100	7440-31-5	0.2	
					Sum in total:	100	
Size W x L x H [max. in mm]				x L x H in mm]	Weight [approx. in g]	Part Numbers	
12.3 x 12.3 x 6.0	[approx. in g] 3.6	B82477G2102		12.3 x 12.3 x 6.0		B82477G2224M	
12.3 x 12.3 x 6.0	3.6	B82477G2103		12.3 x 12.3 x 6.0		B82477G2332M	
12.3 x 12.3 x 6.0	3.6	B82477G2104	M 12.3 x 1	12.3 x 12.3 x 6.0		B82477G2333M	
12.3 x 12.3 x 6.0	3.6	B82477G2105	M 12.3 x 12	12.3 x 12.3 x 6.0		B82477G2334M	
12.3 x 12.3 x 6.0	3.6	B82477G2123	M 12.3 x 1	2.3 x 6.0	3.6	B82477G2472M	
12.3 x 12.3 x 6.0	3.6	B82477G2132	M 12.3 x 1	2.3 x 6.0	3.6	B82477G24	73M
12.3 x 12.3 x 6.0	3.6	B82477G2153		2.3 x 6.0	3.6	B82477G2474M	
12.3 x 12.3 x 6.0	3.6	B82477G2154		12.3 x 12.3 x 6.0		B82477G2682M	
12.3 x 12.3 x 6.0	3.6	B82477G2222	M 12.3 x 1	2.3 x 6.0	3.6	B82477G2683M	
12.3 x 12.3 x 6.0	3.6	B82477G2223	M 12.3 x 1	12.3 x 12.3 x 6.0		B82477G2684M	
Not part of a Pro	oduct Class						

Not part of	a Product Class						
Contact	Dr. Johann Reindl, MAG	EPQM	Important remarks:				
Division	TDK Electronics AG, Ma	gnetics Business Group (MAG)	1) The declaration limit is 0.1% as defined by IEC 62474 (IEC PAS 61906) Traces are				
Address	Rosenheimer Strasse 116b, 81669 Munich		product parts, substances etc. that are below a percentage of 0.1 % by weight, if not otherwise regulated.				
	Tel: +49 89 54020 3030	mailto:	2) This Material Data Sheet contains typical values of the respective products set forth herein				
		johann.reindl@tdk-electronics.tdk.com					
*) others: .(not declarable or prohibited substances acc. GADSL)			best present knowledge and cannot be regarded as binding statements or binding product specifications, unless otherwise explicitly agreed in writing. TDK ELECTRONICS AG AND				
**) typical mass percentage of substance			ITS AFFILIATES HEREBY EXPRESSLY DISCLAIM ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY, WITH REGARD TO THE STATEMENTS AND VALUES CONTAINED HEREIN, INCLUDING BUT NOT LIMITED TO ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR SUITABILITY FOR ANY PURPOSE.				

The products set forth herein are "RoHS-compatible". RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Directive 2011/65/EU of the European Parliament and of the Council of June 8<sup>th</sup>, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



## RoHS - Exemptions for the Product Class / Product according to Annex III: ( 🗹 valid 🗆 not valid )

☑ no exemptions;

Exemption 6 (a): Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0,35 % lead by weight;

Exemption 6 (b): Lead as an alloying element in aluminium containing up to 0,4 % lead by weight;

 $\hfill\square$  Exemption 6 (c): Copper alloy containing up to 4 % lead by weight;

Exemption 7 (a): Lead in high melting temperature type solder (i.e. lead-based alloys containing 85 % by weight or more lead);

Exemption 7 (c)-1: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound;

Exemption 7 (c)-II: Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher;

Exemption 7 (c)-III: Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC;

Exemption 15: Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages;

Other Exemption than above .....